10 May 2021

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Dear Natalie

Thank you for the opportunity to provide feedback on the draft Australian National Subacute and Non-Acute Patient Classification Version 5.0 (AN-SNAP V5).

The document and guiding questions were circulated to colleagues and the following comments were received. Some of the questions have been responded to directly and further comments have been provided below them.

Specifically much of the feedback questioned whether capturing the Clinical Frailty Scale would better assist in estimating resource utilisation in the subacute setting.

Q. Do you support IHPA's proposed approach to use the Frailty Risk Score calculated from ICD-10-AM codes as proxy markers of frailty? If not, why not?

- It is important to recognise that the Frailty Risk Score is not commonly used by clinicians to diagnose or assess frailty – there are internationally accepted definitions and tools to do this. The question at hand is whether while using data readily available within hospital systems, can an improved method of estimating resource utilisation at an individual patient level be derived. It is important to frame the question this way, as opposed to a discussion, to determine the best way to diagnose the clinical syndrome of frailty.

- We are unclear if there is good evidence to support the use the hospital frailty risk score (HFRS) for the outcomes that matter to IHPA. The original Gilbert *et al.* paper did show that it did predict long hospital stay (> 10 days) with a moderate c statistic for individual discrimination of 0.68 in the acute hospital setting. Subsequent publications have not found the same results (see attached Harvey LA *et al.* Age and Ageing 2020; 1–7, doi: 10.1093/ageing/afaa214 which used NSW CHeReL data with a 5 year look back period - adjusting for HFRS did not improve prediction of 30-mortality and HFRS was not useful for predicting prolonged LOS or 28-day unplanned readmission). We do not have access to the resource utilization data which IHPA is presumably using to recommend this approach.

- Many people consider the HFRS a measure of comorbidity rather than truly a measure of frailty.

- Is there data on the utility of HFRS to explain cost, resource use and variance in these outcomes in the subacute setting including GEM setting? Without the opportunity to view this, or undertake shadow pricing exercises, it is difficult to comment on whether this will be an improvement or not.

- Has IHPA done its own costing study to assess the validity of HFRS?

- The current coding system for AN-SNAP is clinician driven and prospective. While it is agreed that frailty is a valuable tool to support decision making it would be preferred if a prospective tool such as the Rockwood clinical frailty scale could be used given that this is already used by clinicians. Coders can miss some aspects or are overly reliant on medical note taking – discounting the rest of the multi-d team within the subacute setting. This has become apparent in the dementia / delirium axis which similarly requires coders input. Despite nurses filling in MMSE and OTs filling in a MOCA or RUDAS coders still look for medical notes suggesting dementia or delirium.

- Dementia, delirium and delirium superimposed on dementia should remain in the matrix given their frequency, particularly in the GEM and non-acute care populations, and their well-known impact on LOS, complications, discharge destination, resource. Dementia delirium measure is a key cost driver and predictor of LOS for services and provides a better explanation of LOS than FIM. It is difficult to imagine that dementia is not a significant driver of resource utilisation in units such as GEM, which is reflected in the current GEM AN-SNAP funding model.

Q. If the Frailty Risk Score is adopted for AN-SNAP V5, do you support IHPA's proposed approach to exclude less defined and redundant codes from the score's calculation? If not, why not?

Again, we are interested in what the data suggests in terms of validated for costs, resource used and explanation of variance in costs.

Q. For future work (i.e. beyond AN-SNAP V5), do you prefer any particular prospective frailty instrument being prioritised by IHPA for further investigation (including potentially being proposed for the admitted subacute and non-acute hospital care national best endeavours data set)? If so, why? Examples of the type of instruments include but are not limited to:

The Rockwood Clinical Frailty Scale is simple to use and is the most widespread tool in clinical use. The operational impact in terms of recording and collecting this would be relatively minimal.

There are other accepted methods for diagnosing frailty, however these are not in widespread routine clinical use and would require a significant investment of time from clinicians to either capture additional information or undertake tests which the patient does not necessarily require (for example to complete the Fried frailty phenotype).

An alternative could include multi-domain frailty index using routine data from electronic health records. For example, the eFI developed from routine data in NSW hospital medical record which has been validated internally and externally (Lo SJ et al., AJA https://doi.org/10.1111/ajag.12888). Clearly the limitation is the lack of a universal EMR.

How well these correlate with resource utilisation is unclear.

Q. Do you support IHPA's proposal to establish a new impairment type group Orthopaedic conditions, replacement for knee, hip and shoulder replacement activity?

We support this. Given that total hip replacement is becoming more common as the repair method for certain types of hip fractures, there needs to be a distinction between elective THR for osteoarthritis, and emergent THR as the surgery for hip fracture. The latter group of patients will be older and sicker with higher rates of delirium/dementia, more multi morbidity, more baseline and post-procedure

functional deficits. They will therefore use more resources per patient, which may be lost if the distinction is not made (accepting they fit better into the fracture rehab group but need to avoid misclassification).

Q. Do you support a measure of frailty being introduced into the classification for adult admitted rehabilitation care, in principle? If so, do you have an approach you recommend?

The current rehabilitation measures are prospective and relate well to the populations of people who attend rehabilitation programs.

The introduction of the frailty score for Rehabilitation would not work well with younger populations (people under 70) and may distort the approach to care for many people.

A frailty measure may be of benefit for the reconditioning stream and for the orthopaedic fractures stream in understanding the impact of frailty on complexity and LOS

Q. Do you support IHPA's proposal to introduce the Frailty Risk Score as a variable for the GEM care type? If not, why not?

Frailty has a significant impact on LOS. There is a concern that the frailty score has displaced the dementia/delirium measure and it may be lost or watered down by the introduction of a more generalised frailty measure.

It is also considered that measures which can be undertaken by clinicians and are used as part of their usual treatment are more successful.

Using a retrospective measure can be challenging, the dementia/delirium element can show under-reporting from coders and there is a similar risk with frailty.

A preferred approach could be to use an existing frailty measure such as discussed above alongside an existing dementia score such as MMSE.

Q. Do you have any suggestions for future work to refine the classification of GEM care such as:

- **care cost drivers which could be further investigated; and/or**
- **data items to consider for national collection?**

Most GEM patients will have some degree of frailty. Is there evidence that once functional status is accounted for that HFRS will discriminate between patients in terms of their relative need for care and variance in resource consumption? Our understanding is there are no published studies validating the use of HFRS in this setting.

For clinician's the priority is that a tool informs and directs care and outcomes. Cost and price of care is inevitably built into that but is not the driver.

Dementia is a significant cost driver and if this is largely removed there is a risk that the frailty measure alone will not support an understanding of costs – or it will be opaque.

Q. Do you support IHPA's proposal to introduce the Frailty Risk Score as a variable for the non-acute care type? If not, why not?

We would be supportive if there is consistent validated data that HRFS have value in explaining costs, resources use and explaining variance in these outcomes. Our understanding is that current published data does not show this.

Q. Do you have any suggestions for future work to refine the classification of non-acute care such as:

- **care cost drivers which could be further investigated; and/or**

- **data items to consider for national collection?**

A major driver for long LOS is dementia delirium and in particular challenging behaviours. The ability to place this client group within a residential aged acre facility is problematic and so drives the LOS. The introduction of a stand-alone dementia measure may be of value, but could not be achieved alongside the frailty measure. There is currently no distinction between patients with dementia in GEM with or without behaviours of concern.

Further Comments

- A major limitation of the Gilbert method for detecting frailty is that it is essentially a comorbidity index and does not capture other domains in frailty well.

- We support exploration about whether there is validated data to support the use of a frailty index to better delineate case mix and provide an explanation to variations in care processes, outcomes and ultimately cost of care.

- More clarity is needed regarding what the AN-SNAP classification is intended to achieve, we assume this to be equivalent funding for equivalent use of resources.

- A frailty assessment tool should be validated in the relevant population, i.e. those (mostly acute) in-patients referred to or accepted by GEM-type, and 'non-acute' (or other applicable) programmes. It is unlikely that the AN-ACC assessment tool has been validated for this use, whilst the CFS may have been.

- If a frailty tool is recommended, adopted and mandated it must not be used as a replacement for formal Comprehensive Geriatric Assessment (CGA) and management.

- The HFRS is a co-morbidity index that is derived after hospital admissions. There is a real opportunity to build on existing relevant work to generate a frailty index from routinely collected data (particularly on EMR platforms) which captures functional and psychosocial issues as well as medical problems. If this could be generated at admission to acute care it could be used to inform care planning, not just analysed retrospectively.

- In Appendix D, the Australian version seems to have actively excluded items that do attempt to measure functional (e.g. R26* gait/mobility, R63* food/fluid) and social deficits (considered

'contextual factors') using the ICD-10 codes. This means that the index is less representative of multi-domain frailty.

- If there is concern about using administrative data to derive a measure of frailty, documenting the clinical frailty scale in subacute care would be a simple solution but prior to this the validity of CFS for cost related outcomes need to be explored and validated using Australian hospital data.

I welcome the opportunity to discuss any of these comments further and if clarification is required, please contact Alison King, Executive Officer on 02 9256 5460 or executive@anzsgm.org.

Yours sincerely

Dr John Maddison
President, Australian and New Zealand Society for Geriatric Medicine